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52

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRUONG, THANHNGA B

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/836,438

Applicant(s)

GASCHER, ALAIN

Examiner

Thanhnga B. Truong

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/06/2005 (Amendment).
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-9 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 18 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment filed on January 06, 2005 has been entered. Claims 1-9 are pending. Claims 1-9 are amended by applicant.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (US 6,088, 450), further in view of Mittelback et al (5,475,770) and further in view of Bergholz et al (US 5,812,067).

a. Referring to claim 1:

i. Davis teaches:

(1) after an initialization time (T0) defined with respect to the reference event (R) of the recognition protocol, a step of transmission by the recognition device of at least two transmission data (P1, P2) [i.e., **Referring to Figure 5, the operational steps performed by the wireless authentication system in periodically exchanging Challenge and Response messages between a node (e.g., computer, locking mechanism for car doors, home or office door entry, etc.) and the token is illustrated. In this embodiment, the node prompts a user for a password but continues to deny access to its contents and networked resources (Steps 400-405). If the password is correct, the node, namely the security device, generates a Challenge message and transmits the Challenge message covering a predetermined distal range from the node (Step 415). Thereafter, it awaits a Response message from the token and its verification before allowing the user access to the content stored on the node or its networked resources (Step 420) (column 6, lines 10-32)],**

(2) a step of transmission by the identification unit of at least two response data (P1R, P2R) automatically generated by the identification unit in response to the transmission data (P1, P2) [i.e., referring to Figure 1, an illustrative embodiment of the wireless authentication system of the present invention is shown. The wireless authentication system 100 features a security device (not shown) implemented within a node (e.g., a personal computer) 110 and a user authentication token ("token") 120 worn by an authorized user 130. The token 120 may be constructed in any form, preferably a form that is not too obtrusive to carry or wear (or hand-free device). Examples of forms that can be used by the tokens include, but are not limited to pagers or identification badges. The function may also be implemented in another device with an alternative purpose such as a cellular telephone. The personal computer 110 periodically attempts to establish a communication link 140, represented by dotted lines, with the token 120 through infra-red ("IR") transmissions or through any other medium that does not require physical connection (e.g., radio frequency "RF" signals in which the personal computer 110 may require an antenna). The communication link 140 may be established and maintained only when the token 120 is within a predetermined distance (e.g., within 20 feet) from the personal computer 110. It is contemplated that although the wireless authentication system is being described with a personal computer, it could be implemented to secure any node being an electronic product such as a peripheral to the computer (printer, mass storage device, etc.), door locking mechanisms (i.e., garage door opener, electronic door locks) and the like (column 3, lines 52-67 through column 4, lines 1-11)],

ii. Though Davis teaches timing circuit as belows:

(1) a step of measuring a reaction time (T_r) between the transmission of a data (P1) and the reception of the corresponding response data (P1R) by the recognition device, and a step of verifying that the measured reaction time is less than a predetermined threshold, wherein at least one of a time interval (T) between the transmission of the at least two successive transmission data (P1, P2) and the

Art Unit: 2135

initialization time (T0) is made to vary randomly [i.e., referring to Figure 5 again, if the password is incorrect, the node prompts the user to re-enter the password. Of course, the node may be configured to allow only one or more tries to enter the password before precluding access to the node without assistance by security (such as a corporate security officer) or imposing a time-delay before one can attempt to try to access the node. Furthermore, if no Response message is received after a prescribed period of time, access is denied (Step 425). Then, if the Response message is correct, the user is provided access to the node and a timing circuit integrated in the node is set to signal when the node is to generate another Challenge message and undergo another Challenge/Response session (Steps 435-445) (column 6, lines 19-46). The periodic Challenge/Response message may be performed in a number of ways as shown in FIGS. 6A-6C. These are shown purely for clarification; other means of authentication may be used without deviating from the spirit of this invention. For example, the node, namely the security device 210, may generate a random number ("RN") 500 and transmit RN 500 in a non-encrypted format as a Challenge message to the token 120 (column 6, lines 51-58)].

iii. However, Davis does not clearly state:

(1) the measured reaction time is less than a predetermined threshold. On the other hand, Mittelbach teaches:

(1) the processing status of a recognition unit being determined by status information which indicates the currently running partial process of a recognition process, the value of the timer being compared with an expected value for the processing time of the partial process currently running in the recognition unit, and if the expected value is exceeded, the control unit triggers an abortion of the recognition process in the recognition unit if a further document is awaiting processing and all recognition units are busy with recognition task (column 1, lines 55-64).

iv. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) clearly state the processing time (in Davis) between the token and security device in order to ensure that the processing job is allocated without time delay to a recognition unit whose recognition process has previously been aborted **(column 2, lines 46-49 of Mittelbach)**.

v. The ordinary skilled person would have been motivated to:

(1) clearly state the processing time (in Davis) between the token and security device because The allocation of processing jobs to the individual recognition units is initiated by a control unit which also monitors the time cycles of the recognition processes in the recognition units. To do so it triggers a timer for setting the processing time of the recognition process, which is compared with an expected value for the processing time of the partial process currently running in a recognition unit. The partial process results here from the processing status of the recognition unit, which is determined by status information and can be called at any time **(column 2, lines 29-38 of Mittelbach)**.

vi. Davis teaches the process between transmitting/responding devices as shown in Figure 1, element 120 and element 110 **(column 3, lines 52-67 through column 4, lines 1-11)**. However, Davis does not clearly mention or suggest the transmission of two data, Bergholz teaches:

(1) The image processor provides an output signal which controls locking functions relating to operation of the vehicle based on a comparison of detected information with stored information relating to distinctive individual features (at least more than one features) of authorized users so that only authorized persons are enabled to use the vehicle (see abstract). Referring also to Figure 1, Bergholz discloses in order to operate or use the vehicle, both data, voice recognition unit 13 and user's distinctive physical reference feature, must be able to detect or transmit (column 2, lines 30-35 and lines 47-60).

vii. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) have applied the teaching of Bergholz into Davis' invention for recognizing authorization to use a vehicle which include an optical-

Art Unit: 2135

electronic image processor to identify a vehicle user. **(column 1, lines 7-10 of Bergholz).**

viii. The ordinary skilled person would have been motivated to:

(1) have applied the teaching of Bergholz into Davis' invention to provide a system for determining authorized use of a motor vehicle that allows only authorized persons to use the vehicle and prevents misappropriation of the vehicle, even after a brief stop, for example, at an intersection **(column 1, lines 36-40 of Bergholz).**

b. Referring to claim 2:

i. Davis further teaches:

(1) in which at least the time interval (T) between the transmission of the at least two successive transmission data (P1, P2) is made to vary in the course of the same exchange of data between the recognition device and the identification unit **[i.e., referring to Figure 5, if the password is incorrect, the node prompts the user to re-enter the password. Of course, the node may be configured to allow only one or more tries to enter the password before precluding access to the node without assistance by security (such as a corporate security officer) or imposing a time-delay before one can attempt to try to access the node (column 6, lines 19-25)].**

c. Referring to claim 3:

i. This claim has limitations that is similar to those of claim 2, thus it is rejected with the same rationale applied against claim 2 above.

d. Referring to claim 4:

i. Davis further teaches:

(1) furthermore comprising an authentication phase (AUT) comprising a wakeup step (RE), a request step (RQ), an anticollision step (ANT), a selection step (SE) and a response step (RP) **[i.e., referring to FIG. 5, the operational steps performed by the wireless authentication system in periodically exchanging Challenge and Response messages between a node (e.g., computer,**

locking mechanism for car doors, home or office door entry, etc.) and the token is illustrated (column 6, lines 10-14)].

e. Referring to claim 5:

i. Davis further teaches:

(1) in which the step of transmission by the recognition device consists in the transmission of several transmission data (P1, P2, P3) and the step of transmission by the identification unit consists in the transmission of several corresponding response data (P1R, P2R, P3R) and furthermore comprising: a step of measuring several reaction times (Tr) between the transmission and the reception of several data (P1, P2, P3, P4), a step of calculating the average of these reaction times, and a step of comparing the latter with the predetermined threshold so as to authenticate the identification unit [i.e., thereafter, timing circuitry within the node is set for the node to generate another Challenge message after a predetermined time period has expired (Step 655), which means the node can generate as many Challenge messages and that the token has to send back as many response messages (column 8, lines 22-24)].

f. Referring to claims 6-9:

i. These claims have limitations that is similar to those of claim 1, thus they are rejected with the same rationale applied against claim 1 above.

Response to Arguments

4. Applicant's arguments filed January 06, 2005 have been fully considered and addressed in the above rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

a. Tomoda et al (US 4,763,121) discloses a keyless entry system allows fully automatic operation of a door lock device of an automotive vehicle (see abstract).

b. Maeda et al (US 6,274,946 B1) discloses a switch body has a wiper switch unit installed with a wiper operation lever, and a turn signal switch unit installed with a turn signal operation lever installed respectively therein. The switch body also has a CPU, a keyless reception circuit and an anti-burglar amplifier circuit incorporated therein. An antenna for the keyless reception circuit located within the wiper operation lever also functions as an antenna for the anti-burglar amplifier circuit. (see abstract).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

TBT
April 30, 2005


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100